Docket No.: BURNHAM.005A

AUG 3 0 2004

## INFORMATION DISCLOSURE STATEMENT

Applicant

Tamm et al.

App. No.

10/665,975

Filed

: September 18, 2003

For

USE OF HEPATITIS B X-INTERACTING

PROTEIN (HBXIP) IN MODULATION OF

**APOPTOSIS** 

Examiner

Unknown

Group Art Unit

1648

Lugust 26, 2004

Mail Stop: Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing 31 references that are also enclosed.

This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Datad.

By:

Marina L'Gordey

- Registration No. 52,950

Agent of Record

Customer No. 20,995

(805) 547-5580



Case Docket No. BURNHAM.005A

Date: August 26, 2004

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)

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For

USE OF HEPATITIS B X-

INTERACTING PROTEIN

(HBXIP) IN MODULATION OF

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Examiner

Unknown

Group Art Unit:

1648

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop: Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

August 26, 2004

Maring Gordey, Reg. No. 52,950

## TRANSMITTAL LETTER

Mail Stop: Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 with thirty-one (31) references.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Marija L. Gordey

Registration No. 52,950

Agent of Record

Customer No. 20,995

(805) 547-5580

FORM PRO 1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. BURNHAM.005A

APPLICATION NO. 10/665,975

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT Tamm et al.

FILING DATE September 18, 2003 GROUP 1648

		-	U.S. PATENT DOCUMENTS			
EXAMINER INITIAL	DOCUMENT NUMBER	DATÈ	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)

			FOREIGN PATENT DOCUMENTS				
EXAMINER	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
INITIAL						YES	NO

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)					
	1.	Ambrosini, G. et al. "A novel anti-apoptosis gene, survivin, expressed in cancer and lymphoma." Nature Med 3:917-921 (1997).				
	2.	Banks, D.P. et al. "Survivin does not inhibit caspase-3 activity." Blood 96:4002-4003 (2000).				
	3.	Bratton, S.B. et al. "Recruitment, activation and retention of caspases-9 and -3 by Apaf-1 apoptosome and associated XIAP complexes." <i>EMBO J</i> 20:998-1009 (2001).				
	4.	Cryns, V. et al. "Proteases to die for." Genes Dev 12:1551-1570 (1998).				
	5.	Deveraux, Q.L. et al. "IAP family proteins: Suppressors of apoptosis." Genes Dev 13:239-252 (1999).				
	6.	Deveraux, Q.L. et al. "X-linked IAP is a direct inhibitor of cell death proteases." Nature 388:300-304 (1997).				
	7.	Gottlob, K. et al. "The Hepatitis B virus HBx protein inhibits caspase 3 activity." J Biol Chem 273:33347-3335. (1998).				
-	8.	Grossman, D. et al. "Transgenic expression of survivin in keratinocytes counteracts UVB-induced apoptosis and cooperates with loss of p53." <i>J Clin. Invest</i> 108:991-999 (2001).				
	9.	Kim, C.M. et al. "HBx gene of hepatitis B virus induces liver cancer in transgenic mice." Nature 351:317-320 (1991).				
	10.	Li, F. et al. "Control of apoptosis and mitotic spindle checkpoint by survivin." Nature 396:580-584 (1998).				
	11.	Li, P. et al. "Cytochrome c and dATP-dependent formation of Apaf-1/Caspase-9 complex initiates an apoptotic protease cascade." <i>Cell</i> 91:479-489 (1997).				
	12.	Lok, A.S. "Hepatitis B infection: Pathogenesis and management." J Hepatol 32:89-97 (2000).				
	13.	Marusawa, H. et al. "HBXIP functions as a cofactor of survivin in apoptosis suppression" The EMBO J. 22:2729-2740 (2003)				
	14.	Marusawa, H. et al. "Latent hepatitis B virus infection in healthy individuals with antibodies to hepatitis B core antigen." <i>Hepatology</i> 31:488-495 (2000).				
	15.	Matsuzawa, S. et al. "Siah-1, SIP, and Ebi collaborate in a novel pathway for -catenin degradation linked to p53 responses." Mol Cell 7:915-926 (2001).				
-	16.	Melegari, M. et al. "Cloning and characterization of a novel hepatitis B virus x binding protein that inhibits viral replication." J Virol 72:1737-1743 (1998).				

\*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609, DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

SHEET	2	OF	2
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ON DISCLO
BY APPL

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

DISCLOSURE STATEMENT

DEM!	Tamm et al.		
(USE SEVERAL SHEETS IF NECESSARY)	FILING DATE		

ATTY. DOCKET NO.	APPLICATION NO.
BURNHAM.005A	10/665,975
APPLICANT Tamm et al.	

GROUP 1648

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)				
		Murakami, S. "Hepatitis B virus X protein: A multifunctional viral regulator." J Gastroenterol 36:651-660 (2001).			
	18.	O'Connor, D.S. et al. "Regulation of apoptosis at cell division by p34 <sup>cdc2</sup> phosphorylation of survivin." <i>PNAS USA</i> 97:13103-13107 (2000).			
	19.	Reed, J.C. et al. "BIRinging chromosomes through cell division - and survivin the experience." <i>Cell</i> 102: 545-548 (2000).			
	20.	Reed, J.C. "The survivin saga goes in vivo." J Clin Invest 108:965-969 (2001).			
	21.	Riedl, S.J. et al. "Structural basis for the inhibition of caspase-3 by XIAP." Cell 104:791-800 (2001).			
	22.	Salvesen, G.S. "Caspases: opening the boxes and interpreting the arrows." Cell Death Differ 9:3-5 (2002).			
	23.	Shin, S. et al. "An anti-apoptotic protein human survivin is a direct inhibitor of caspase-3 and -7." <i>Biochem</i> 40: 1117-1123 (2001).			
	24.	Stennicke, H.R. et al. "Caspase-9 can be activated without proteolytic processing." <i>J Biol Chem</i> 274:8359-8362 (1999).			
	25.	Sun, C. et al. "NMR structure and mutagenesis of the inhibitor-of-apoptosis protein XIAP." <i>Nature</i> 401:818-822 (1999).			
	26.	Tamm, I. et al. "IAP-family protein survivin inhibits caspase activity and apoptosis induced by Fas (CD95), Bax, caspases, and anticancer drugs." Cancer Res 58:5315-5320 (1998).			
·	27.	Velculescu, V.E. et al. "Analysis of human transcriptomes." Nature Gen 23:387-388 (1999).			
	28.	Verdecia, M.A. et al. "Structure of the Human anti-apoptotic protein survivin reveals a dimeric arrangement." <i>Nature Struct Biol</i> 7:602-608 (2000).			
	29.	Yang, J. et al. "Prevention of apoptosis by Bcl-2: release of cytochrome c from mitochondria blocked." <i>Science</i> 275: 1129-1132 (1997).			
	30.	Zhou, Q. et al. "Target protease specificity of the viral serpin CrmA: analysis of five caspases." J Biol Chem 272: 7797-7800 (1997)			
	31.	Zou, H. et al. "An APAF-1 cytochrome c multimeric complex is a functional apoptosome that activates procaspase-9." <i>J Biol Chem</i> 274:11549-11556 (1999).			

September 18, 2003

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**EXAMINER** 

DATE CONSIDERED